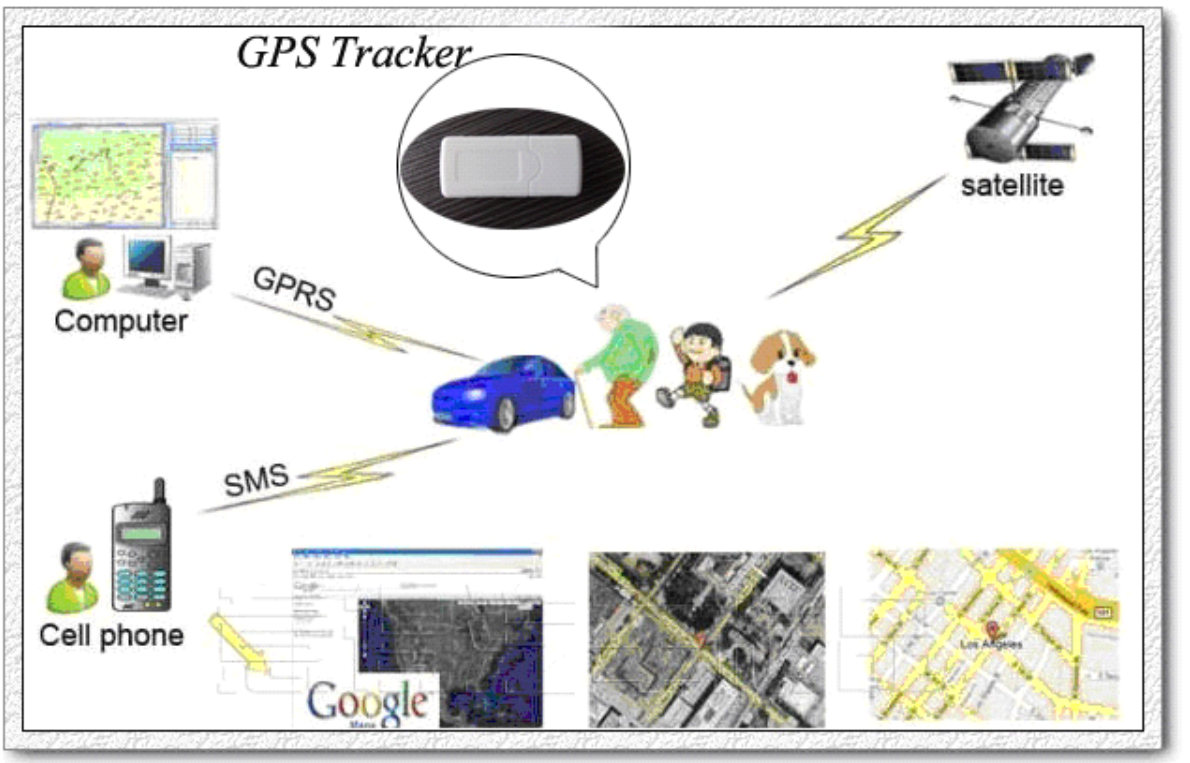
PERSONAL GPS TRACKING SOLUTION

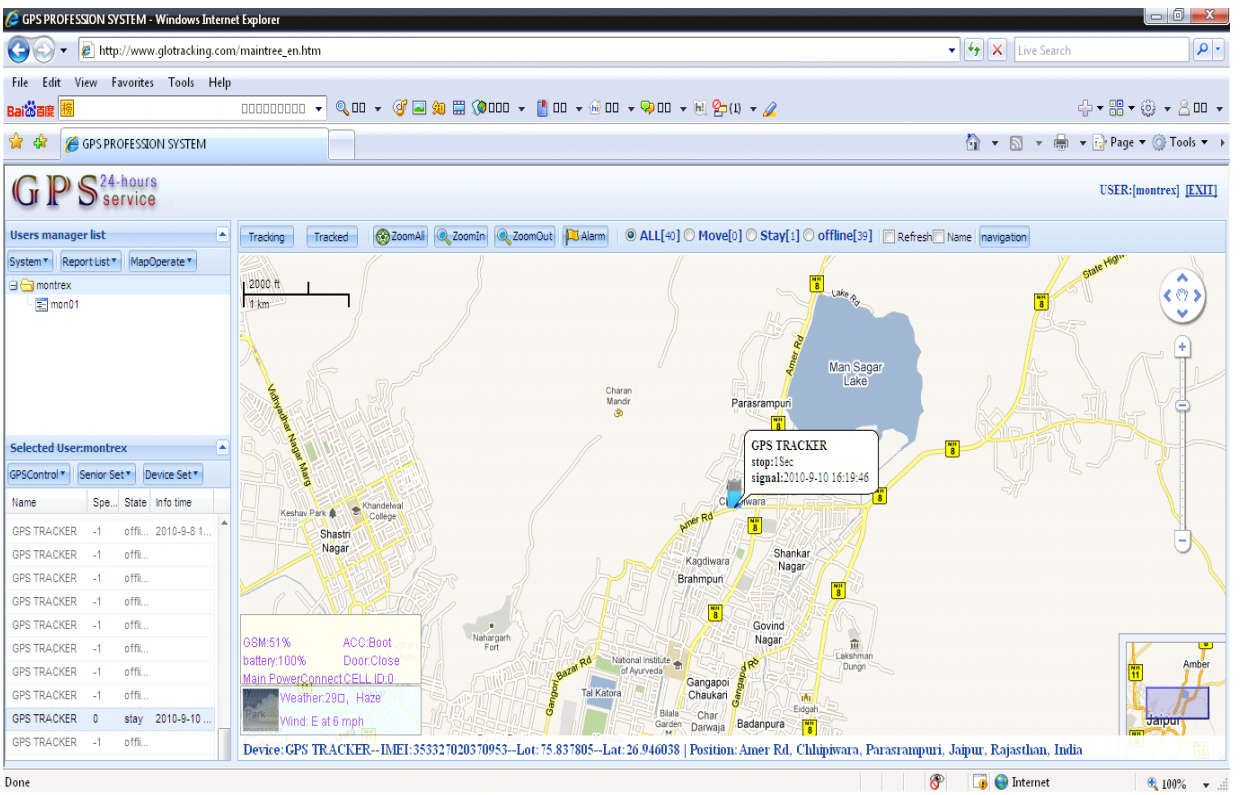


Contents Tables

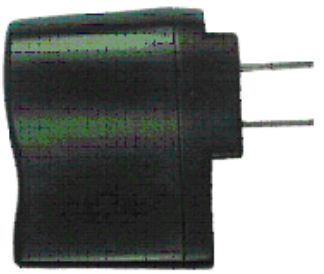
1. Introduction----------1
2. Hardware Description----------2
3. What's new? ----------2
4. Main Features----------3
5. Applications----------3
6. Specification----------3
7. Start up----------4
8. Set the authorized number----------6
9. Delete authorized number----------7
10. Get instant position via TWO ways----------6
11. Auto-track function----------8
12. Alert----------9
13. Set the local time----------12
14. GPRS setting----------14
15. Check tracker's parameters----------14
16. Displaying location on Google map----------15
17. Displaying location on your cell phone----------15
18. Real time tracking on website or PC software----------15
19. Cautions----------21

1. Introduction

This tracker is a personal remote location device with small size, build-in long standby time battery and easy to use. This tracker can be used as a monitor. This tracker sends alerts and the alerts include Date, Time, Coordinate, Speed and Map URL link. It will send the coordinate to the designated server by GPRS and then displaying the location by tracking software.

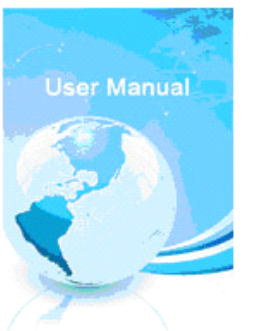


USB Charger, User manual, USB cable, Lanyard, Tracker, Key



Charger

Tracker



User manual

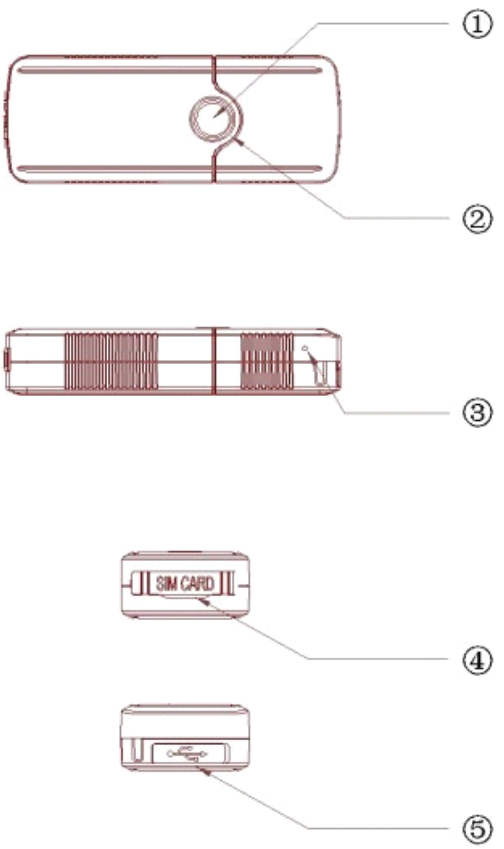
USB Cable

Key

Lanyard

Parts

2. Hardware Description



1. SOS;
2. LED;
3. Speaker;
4. SIM card;
5. USB;

3. What's new?

3.1 Smaller size: As small as a U disk so that it can be linked to the key chain.

3.2 Longer battery life (standby time is 50hours)

3.3 Position accurate will combine the GPS info and GSM base station info.

3.4 Get position by 3 ways: Search the coordinate in Google map, click the URL and see the position in cell phone directly and view the position and history in tracking software.

4. Main Features

- Locating and tracking via SMS or GPRS
- Listen in function
- Geo-fence alert
- Speeding alert
- Low battery alert
- Position accurate will combine the GPS info and GSM base station info
- Position transmit

5. Applications

- Protect the child/elderly/disabled/pet etc.
- Personnel management
- Track the vehicle/ equipment etc.
- Provide peace-of-mind for businessmen
- Tracking system for Express/Carriers/Logistics

6. Specification

Content	**Specs**
Dimension	60mm x 22.8mm x 12mm
Weight	23g
Network	GSM/GPRS
Band	900/1800Mhz
GPS chip	SIRF3 chip
GPS sensitivity	-159dBm
GPS accuracy	5m
Cold start	42 sec.
Warm start	38 sec.
Hot start	1 sec.

Battery	Chargeable 3.7V 380mA/h
Operation temperature	-20°C to +55°C
Humidity	5%--95% non-condensing

7. Start up

TRACKER: Do charge the battery for 8 -12 hours after first use. Then, the battery can be charged fully in 4-5 hours. In order to protect the device please use the battery and charger which come with the tracker.

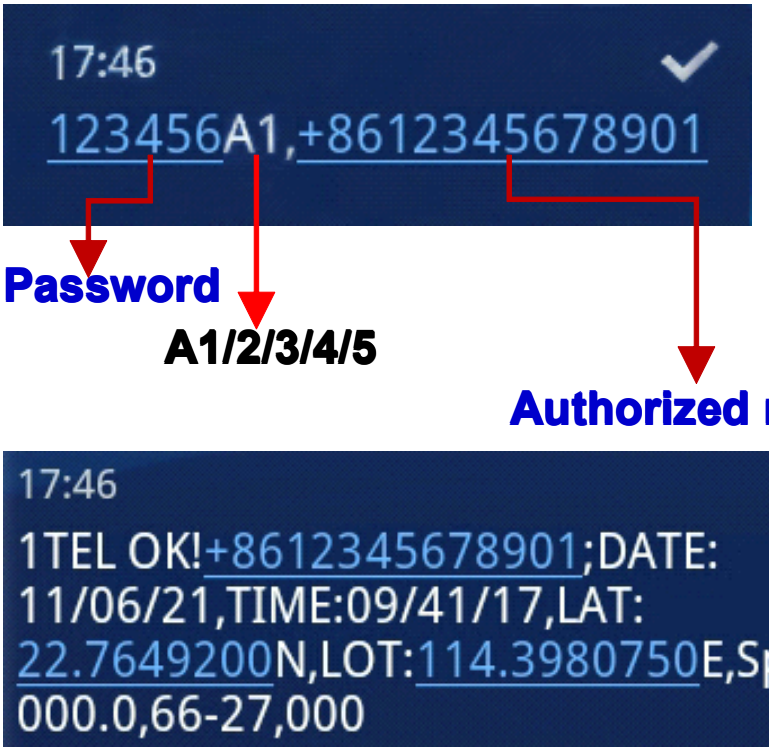
SIM CARD: Please be sure that there is call display but no call transfer, and PIN code is off.

Switch on: Please take the unit outdoors or near the window. The device will be switched on after inserting the sim card.

Switch off: e device will be switched off after taking out the sim card.

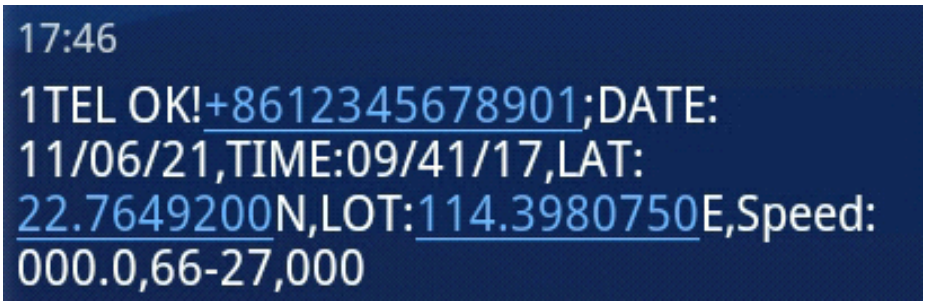
8. Set the authorized number

Send SMS“**123456A1,phone number**” to set the first SOS number. At least, you have to set 1 authorized number
A1/2/3 is SOS number



Command SMS

Note:
‘A’ must be capital



Reply SMS

Note: All the letters in any commands must be English in capital and make sure there is no space in the command. Phone number must include the country code. For example: +86 is the country code of China. Please do not use 00 instead of +.
123456 is the default password of the tracker.

9. Delete authorized number

Command SMS
123456A1 (2/3/4/5), D
'A, D' must be capital

Reply SMS

E.g. send "**123456A1,D**" to delete the A1(SOS) number.

10. Get instant position via TWO ways

10.1 Get instant position by calling the tracker

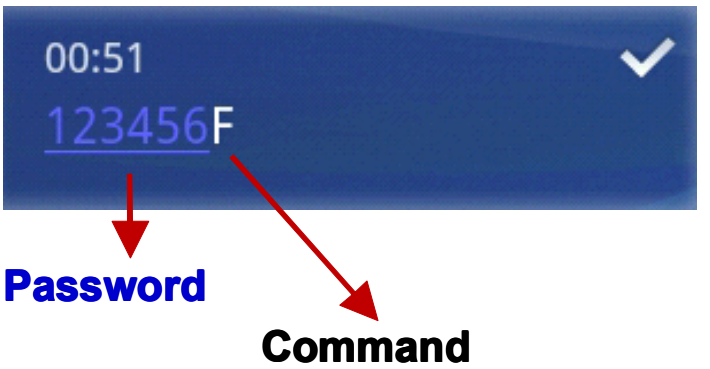
You can use the authorized numbers to call the tracker SIM number for at least 2 seconds, and then hang up the call before the tracker hangs up or receives it. The tracker will reply a Google position URL SMS. You can click on this URL to see the position. The tracker will not reply the SMS If you did not hang up the call before the tracker hangs up or receives it.

Note: The tracker will reply to any incoming call number if you have not set the authorized numbers yet. Once you

have set the authorized number, the tracker will reply SMS to the authorized numbers only.

10.2 Get instant position by sending SMS command

Send "**123456F**" to the unit. It will reply its position.



Command SMS

Note: F must be capital

Reply SMS

11. Auto-track function

Send SMS "**123456M0/M1, xxxS/M/H**" to the unit, the tracker will reply the location URL messages to **A5** according to the time interval. If the device has been

connected to the server, the reply data will be sent to the server only, which means the server has the priority.

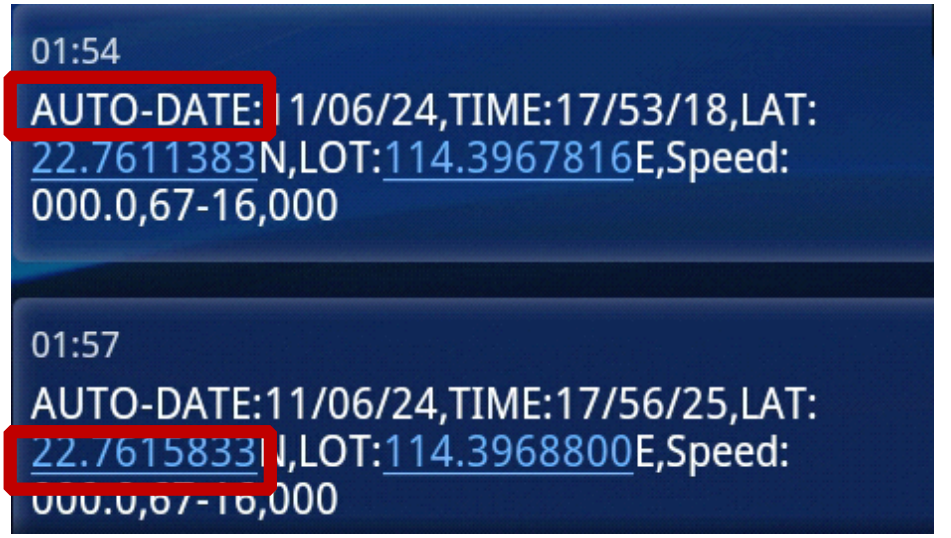
Command SMS

Note: M must be capital.

M1 means turn on

M0 means turn off

Reply SMS



Reply SMS

Tracking data

xxx is interval time and must be three digits,030S means 30S.

S—second, M—minute, H—hour
H should be≤90, S,M should be <255
E.g. send“**123456M1,030S**” to the tracker means every 30 seconds send back a position coordinate to the A5 number. Send“**123456M0,030S**” to the tracker means stop the continuous tracking.

12. Alerts

12.1 Speeding alert

Send SMS “**123456J0/J1,speed**” to set the Speeding alert function.

Command SMS
J0 means turn off the function
J1 means turn on the function

Reply SMS

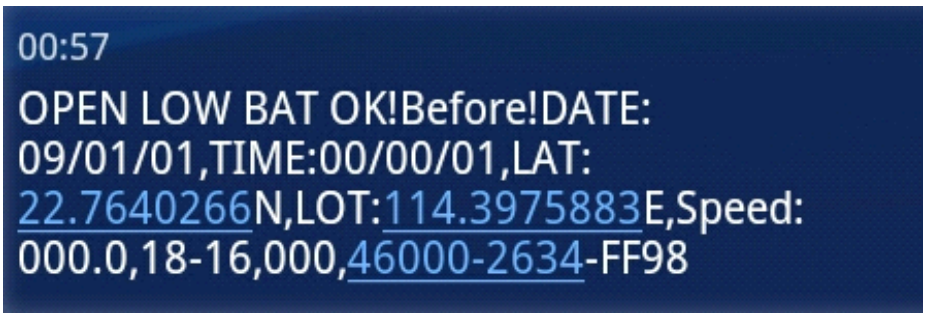
When the speed exceeds 80 km/h, the unit will send SMS as “Over speed! +GPS info” to the A1, A2, A3 number.
Note: J must be capital, speed should be<250 and must be

3 digits, e.g. 080= 80 km/h.
E.g. Send "**123456J0,080**" to turn off this function.

12.2 Low-battery alert

Send SMS "**123456N0/N1,battery**" to set the Low-battery alert function.

Command SMS
J0 means turn off the function
J1 means turn on the function



Reply SMS

Reply SMS
Low battery
Now is 23%

When the battery level bellows 30%, the unit will send SMS as "Low power! +GPS IM" to the A1, A2, A3 number.
Note: N must be capital, battery is the Low-battery

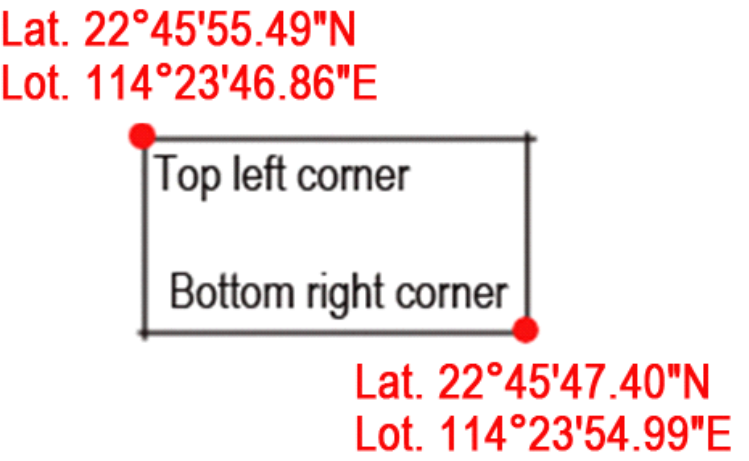
percentage, It should be<45 and 2 digits, e.g. 30= 30%.
E.g. Send "**123456N0,30**" to turn off this function.

12.3 GEO-FENCE alert

"**123456Ixyz,aabbccddefffgghhiijkkIlmmnneppp qqrrssj**" send above message to set up the geo-fence for the device to restrict its movement area. The device will send the message to the A1, A2, A3 numbers as "Stockade +geo info" if the tracker enters/exits the preset zone. 5 groups GEO-FENCE areas can be set for the tracker.

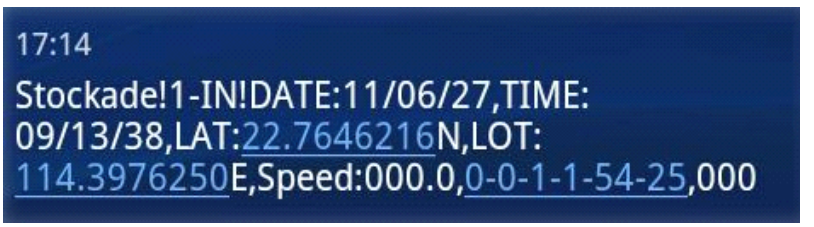
Note: I must be capital.
x=NO. of the GENFENCE(1-5)
y=1 means ON, y=0 means OFF
z=0 means go into, z=1 means go out
e=N means north latitude, e=S means south latitude
j=E means east longitude, j=W means west longitude
aa,bb,cc,dd,gg,hh,ii,kk,ll,mm,nn,qq,rr,ss must be 2 digits.03 means 3. fff,ppp must be 3 numbers.011 means 11.

E.g. The first Lat.22°45'55.49"N, Long.114°23'46.86"E
The second Lat.22°45'47.40"N, Long.:114°23'54.99"E



Command SMS

Reply SMS



GEO-Fence
Alarm SMS

13. Set the local time

Send SMS "**123456Ltime zone**" to set the local time

Note: L must be capital, + in the time zone means east, - in the time zone means west. Time zone must be 2 numbers. So Beijing time zone should be like this: +08

E.g. send "123456L+08" to set the time to the Beijing time
send "123456L-08" to set the time to Los Angeles time

Note: Send "**123456L+XX:30**" to set the east XX and half time zone.
Send "**123456L-XX:30**" to set the west XX and half time zone.

E.g. send "**123456L+05:30**" to set the India time

14. GPRS setting

Send SMS "**123456B**" to get the IMEI number of the unit.

Note: B must be capital.

E.g. send SMS "**123456B**"

Note: Before you execute the following GPRS connection, please submit the IMEI # to the manufacturer to register the IMEI #.

In order to use GPRS function, the user needs to set IP, Port

and APN (Access Point Name) by sending SMS commands. Make sure that the SIM card in the tracker has the GPRS function activated.

Send SMS "**123456C$$$$,IP:Port**" to set the APN, IP and port.

Note: C must be capital. Please get APN from your local GSM operators and the APN is case sensitive. Users do not need to input the server's IP & Port if you use the manufacturer's server.

E.g. send SMS "**123456CCMNET**".CMNET is the APN of China Mobile, and it will connect the manufacturer's server as a default mode.

Note: The APN should be in wap mode.

Send SMS "**123456O&&&&, @@@@**" to set the username and password for APN.

Note: &&&& is the username and @@@@ is the password. O must be capital. If the GSM provider doesn't create a username and password for the APN, you can ignore this command.

E.g. send SMS "**123456Owap, wap**".

Note: The username and password should be in wap mode.

Send SMS "**123456D**" to turn on GPRS connection

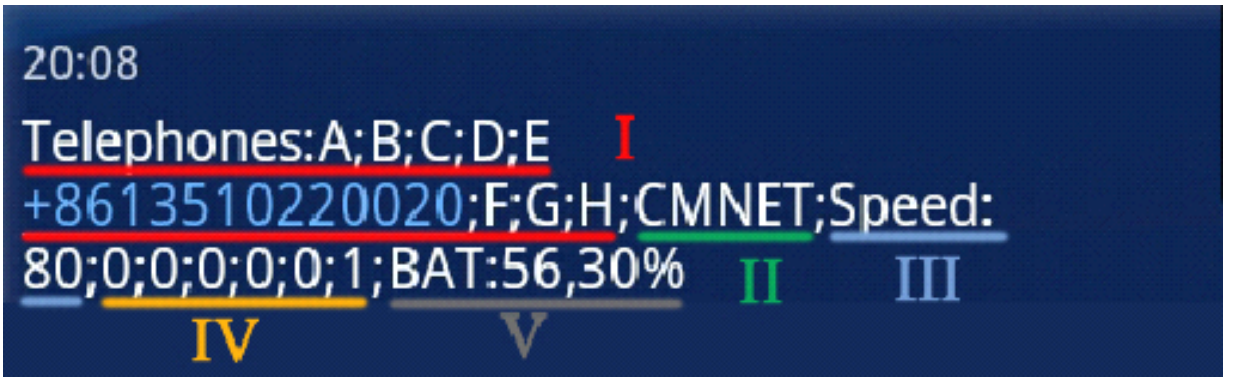
Note: D must be capital.

E.g. send SMS "**123456D**"

Send SMS “**123456E**” to turn off GPRS connection
Note: E must be capital.
E.g. send SMS “**123456E**”

15. Check tracker’s parameters

Send command 123456G to check the parameters
The respond SMS is as follow:



I Telophones:A; B; C; D; E (the phone number of A1; A2; A3; A4; A5)

II CMNET is China mobile’s APN

III Speed: 80 is over speed value

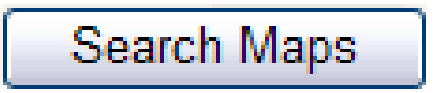
IV0;0;0;0;0;0;1 :Over speed alarm; auto-track; auto-arm; Move alarm; Rrm; Low battery alarm(0 is OFF, 1 is ON)

V BAT: 56, 30%: 56 is the power value, 30% is low power alarm value

16. Displaying location on Google map

Go to http://maps.google.com and type in the latitude and longitude like this: **22.7640801N,114.3975566E**

Click search button, then you can see the position.



Download Google earth software from http://earth.google.com/

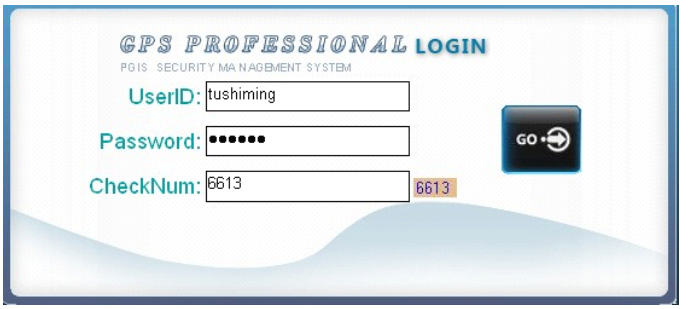
Start the Google Earth software and type the latitude and longitude into the software like this: **22.7640801N,114.3975566E**. Click search. Then you can see the position.

17. Displaying location on your cell phone

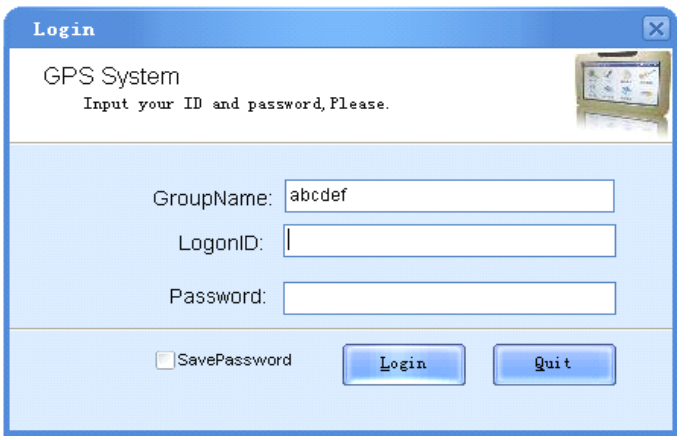
It will reply a location URL SMS like:
http://maps.google.com/maps?f=q&hl=en&q=22.7647333,114.3978316&ie=UTF8&z=16&iwloc=addr&om=1speed:000.0,&imei=012207009017010
Click on the URL, then you can see the location

18. Real time tracking on website or PC software

The device can be tracked on our tracking platform, please contact us for more information.



Tracking website



PC software

Note: alternative from tracking website and PC software

19. Cautions

Please comply with the instructions to extend the unit life:

1. Keep the unit dry. Any liquid, i.e. rain, moisture, may destroy or damage the inside circuitry.
2. Don’t use & store the unit in dusty places.
3. Don’t put the unit in overheated or overcooled places.
4. Handle carefully. Don’t vibrate or shake it violently.
5. Clear the unit with a piece of dry cloth. Don’t clean in chemicals, detergent.
6. Don’t paint the unit, this may cause some foreign materials left in between the parts.
7. Don’t disassemble or refit the unit.
8. Please use the battery and charger provided by manufacturer. Using other batteries and chargers will cause unwanted situation.
9. Don’t dismount the antenna randomly, or use other antennas. This may interfere the transmission, and increase the radiation as well.

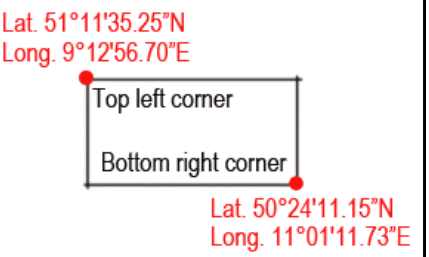
SMS commands list

Appendix*

➢ name	➢ Sentence content	➢ Description
➢ Set authorized numbers	➢ **123456A1,phone number** ➢ **123456A2,phone number** ➢ **123456A3,phone number** ➢ **123456A4,phone number** ➢ **123456A5,phone number**	➢ A1,A2,A3 is for setting the 3 SOS numbers. ➢ A4,A5 is for the call center number Phone number must include the country code like +8613812345678. +86 is the country code of China. Please do not use **'00'** instead of **'+'**
➢ Sample of setting authorized numbers	➢ **123456A1,+8613812345678** (**'A' and the comma must be English**)	➢ Set +8613812345678 as the first SOS number (A1).
➢ Delete authorized numbers	➢ **123456A1,D** ➢ **123456A2,D** ➢ **123456A3,D** ➢ **123456A4,D** ➢ **123456A5,D**	➢ A1,A2,A3 is for deleting the 3 SOS numbers. ➢ A4,A5 is for deleting the call center number

➢ Calling out automatically	➢ **123456V31,phone number** **Calling phone number in listen-in mode**	➢ Tracker will call this number automatically in listen-in mode.
➢ Get position by SMS	➢ **123456F**	➢ It will reply the latitude and longitude as well as a link to the cell phone
➢ Set continuous tracking	➢ **123456Mx,yyyz**	➢ x=1 means on, x=0 means off ➢ yyy means time interval. If z=S/M it should be <=255.if z=H, it should be<=090. It must be three numbers,030S means 30S ➢ Z means time unit， z=S means second, z=M means minute, z=H means hour
➢ Sample of Setting continuous tracking	➢ **123456M1,030S**	The tracker will reply the position according to the time interval you set (30 seconds). If the tracker has connected to server it will send to the server by GPRS or it will be sent to the cell phone by SMS
➢ Set the speeding	➢ **123456Jx,yyy**	➢ x=1 means on, x=0 means off ➢ yyy means the alarm

alarm		speed, it should be<250 and must be three digitals, e.g. 080=80km/h.
➢ Sample of setting speeding alarm	➢ **123456J1,080**	➢ The tracker will send a speeding alarm to server if it is over the 80km/h
➢ Set GEO fence	**123456Ix,y,z, aabbccddefffgghhiij kkllmmnnepppqqrrs sj** 	➢ x=NO. of the GEO-fence(1-5),5 GEO fence can be set ➢ y=1 means on, y=0 means off ➢ z=0 means go in, z=1 means go out ➢ e=N means the north latitude, e=S means the south latitude ➢ j=E means the east longitude, j=W means the west longitude ➢ aa,bb,cc,dd,kk,ll,mm,nn,qq,rr, ss must be 2 numbers.03 means 3. ➢ fff,ppp must be 3 numbers.011 means 11

➢ Example of setting GEO fence	**123456I1,1,1,51113525N009125670E50241115N011011173E** 	➢ The tracker will send an alarm data if it is in/out the district you set.
➢ Set the time zone	➢ **123456Lxyy**	➢ x=+ means east x=- means west ➢ yy means the time zone，must be 2 numbers
➢ Sample of setting the time zone	➢ **123456L+08**	➢ Set the east 8 zone
➢ Set the low battery alarm	➢ **123456Nx,yy**	➢ x=1 means on,x=0 means off yy is the alarm battery percentage. It must be<45 and 2 numbers.
➢ Sample of setting the low battery alarm	➢ **123456N1,40**	➢ The tracker will send a low battery alarm if the battery is lower than 40%

➢ Modify the password	➢ **123456H456789**	➢ 456789 is the new password, new password must be 6 numbers
➢ Set the APN,IP and port	➢ **123456C$$$$,IP:Port**	➢ $$$$ is the APN, you can get the APN from your local GSM provider.
➢ Sample of setting the APN	➢ **123456CCMNET, 119.122.101.91:9289**	➢ CMNET is the APN of China mobile.
➢ Set the username and password for APN	➢ **123456O&&&&, @@@@**	➢ &&&& is the username and @@@@ is the password. ➢ If the SIM card doesn't need username and password for the APN, pls ignore this command
➢ Sample	➢ **123456Ointernet,internet123**	➢ The user name is internet and the password is internet123.
➢ Open ➢ GPRS	➢ **123456D**	➢ The tracker will send a confirmation SMS back after successful connection.
➢ Close GPRS	➢ **123456E**	➢ The tracker will close the connection with the server.
➢ Get the IMEI number	➢ **123456B**	➢ It will reply the IMEI number of the tracker.

➢ Check the settting	➢ **123456G**	➢ Check all parameters set in tracker